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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,566	01/12/2004	Reiner Augusto Campillo Terrero	034055-001	8232

21839 7590 08/10/2006

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EXAMINER	
SCHNEIDER, JOSHUA D	

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/754,566	CAMPILLO TERRERO ET AL.	
	Examiner	Art Unit	
	Joshua D. Schneider	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 9-13 are objected to because of the following informalities: the preamble of these dependant claims does not match with that of the independent claim upon which they depend. As such, it is confusing as to whether the claims refer to one of the active devices being switched or the apparatus as a whole. The preambles should be changed to reflect that it is indeed the entire apparatus being modified and not a device that is part of the larger apparatus. Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 15-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It is not clear from the claim or the specification whether the computer readable medium is tangibly embodied. The specification does not limit the computer readable medium to tangible embodiments, such as storage mediums, and therefore includes non-statutory embodiments, such as transmission mediums.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7 and 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,073,188 to Fleming.

6. With regards to claim 1, Fleming teaches selecting the active device to manage (column 4, lines 43-45), establishing a link between the communication port of the concentrator device and the management port of the concentrator device associated with the selected active device (column 4, lines 43-49, and column 5, lines 1-12), and communicating with the selected active device from the computer (column 5, lines 1-22).

7. With regards to claim 2, Fleming teaches selecting the active devices to manage comprises manually activating a switch associated with the management port with which the desired active device is connected (column 4, lines 46-67).

8. With regards to claim 3, Fleming teaches selecting the active devices to manage comprises: selecting the desired active device through a user interface on the computer (column 4, lines 46-67); and sending a signal to the concentrator device indicating the selected active device (column 4, lines 52-59).

9. With regards to claim 4, Fleming teaches receiving a signal to operate the concentrator device in simultaneous mode (column 2, lines 22-28); and establishing a simultaneous link between the communications port of the concentrator device and each of the selected management ports of the concentrator device (column 4, lines 46-67, and column 7, line 66, through column 8, line 20).

10. With regards to claim 5, Fleming teaches manually activating a switch associated with the simultaneous mode (manual switching in column 4, lines 46-67, and switching to a simultaneous mode in column 7, line 66, through column 8, line 20).

11. With regards to claim 6, Fleming inherently teaches the plurality of management ports support the same protocol (as non differentiated group members coupled through same devices are interchangeable, column 3, lines 33-62).

12. With regards to claim 7, Fleming teaches the communication port of the concentrator device and the plurality of management ports support different protocols (various types of connections alternately different than ATA, SCSI, and USB connections, column 2, lines 8-22, and column 3, lines 33-62).

13. With regards to claim 15, Fleming teaches sending signals to a concentrator device (column 6, lines 59-67), receive signals from the concentrator device (column 7, lines 35-53), receive an indication of one or more active devices to be managed (column 6, lines 59-63), and wherein at least one of the signals sent to the concentrator device indicates one or more active devices to be managed (column 6, lines 59-63).

14. With regards to claim 16, Fleming teaches at least one of the signals received from the concentrator device provided information regarding establishment of a link between a communication port and a manage port of the concentrator device (column 6, lines 59-63).

15. With regards to claim 17, Fleming teaches at least one of the signals received from the concentrator device initiated in one of a plurality of active devices connected to the concentrator device (boot from disk, column 7, lines 35-65).

16. With regards to claim 18, Fleming teaches at least one of the signals sent to the concentrator device is passed to one or more of a plurality of active devices connected to the concentrator device (column 7, lines 35-53).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,073,188 to Fleming in further view of U.S. Patent 6,957,287 to Lou et al.

19. With regards to claim 8, Fleming teaches at least one communication port (Fig. 2A element 212); a plurality of management ports (Fig. 2A, element D1-Dn); a plurality of switches (multiple transistors, column 7, lines 4-9), but fails to explicitly teach a microprocessor configured to establish a link between the communication port and at least one selected management port. Such a microprocessor may be inherently taught as some sort of processing controller must exist to control the switching functions (as shown in Fig. 2A, element 220) and output signals taught by Fleming. However, Lou explicitly teaches a switching device for connecting computers to peripherals incorporating a processor to control and effectuate switching (column 4, line 51, through column 5, lines 57). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the CPU switching control of Lou

with peripheral switch control of Fleming in order to allow for configurable switching control and decrease design cost through the use of off the shelf products.

20. With regards to claim 9, Fleming teaches the switch control is configured to receive an external signal indicating the selected management port (column 4, lines 43-49).

21. With regards to claim 10, Fleming teaches the switch control is configured to receive an internal signal indicating the selected management port (column 4, lines 43-49), wherein the internal signal is generated based on the activation of one of said plurality of switches (column 4, lines 52-59).

22. With regards to claim 11, Fleming teaches the switch control is configured to establish a simultaneous link between the communication port and two or more of the plurality of management ports (manual switching in column 4, lines 46-67, and switching to a simultaneous mode in column 7, line 66, through column 8, line 20).

23. With regards to claim 12, Fleming teaches the plurality of management ports support the same protocol (as non differentiated group members coupled through same devices are interchangeable, column 3, lines 33-62).

24. With regards to claim 13, Fleming teaches the communication port and the plurality of management ports support different protocols (various types of connections alternately different than ATA, SCSI, and USB connections, column 2, lines 8-22, and column 3, lines 33-62).

25. With regards to claim 14, Fleming teaches a plurality of active devices (Fig. 2A, computer connected to elements CN1 to CNn, column 7, lines 9-24), a concentrator device (Fig. 2A element 214), the concentrator device comprising at least one communication port (Fig. 2A element 212); a plurality of management ports (Fig. 2A, element D1-Dn); but fails to explicitly

teach a microprocessor configured to establish a link between the communication port and at least one selected management port. Such a microprocessor may be inherently taught as some sort of processing controller must exist to control the switching functions (as shown in Fig. 2A, element 220) and output signals taught by Fleming. However, Lou explicitly teaches a switching device for connecting computers to peripherals incorporating a processor to control and effectuate switching (column 4, line 51, through column 5, lines 57). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the CPU switching control of Lou with peripheral switch control of Fleming in order to allow for configurable switching control and decrease design cost through the use of off the shelf products.

26. Fleming further teaches receiving an external signal indicating a selected active device (column 6, lines 59-67), and establishing a link between the communication port and the management port associated with the selected active device (column 4, lines 43-49, and column 5, lines 1-12), a switch control user interface configured to: receive an indication of the active device to be managed (column 6, lines 59-67), and send a signal to the concentrator device indicating the active device selected to be managed (column 6, lines 59-63), and wherein each of the plurality of active devices are connected to a management port of the concentrator device and a communication port of the concentrator device is connected to a communication port of the switch controller (column 6, line 48, through column 7, lines 65).

Conclusion

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Application Publication 2004/0088465 to Bianchi teaches a switching

controller that switches between active devices to be managed. U.S. Patent 6,308,239 to Osakada et al. teaches a USB switching device that switches a plurality of peripheral units among a plurality of host devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JDS

KIM HUYNH
SUPERVISORY PATENT EXAMINER
8/06/05